

#9/C

SEQUENCE LISTING

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PRICKETT, KATHRYN S.  
BHAVSAR, SUNIL

<120> USE OF EXENDINS AND AGONISTS THEREOF FOR  
THE REDUCTION OF FOOD INTAKE

<130> 231/181

<140> US 09/003,869  
<141> 1998-01-07

<150> US 60/034,905  
<151> 1997-01-07

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<151> 1997-11-14

<150> US 60/066,029  
<151> 1997-11-14

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<170> FastSEQ for Windows Version 3.0

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<212> PRT  
<213> Heloderma horridum

<220>  
<221> AMIDATION  
<222> (39)...(39)  
<223> amidated Ser (Serinamide)

&lt;400&gt; 1

His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 2

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Heloderma suspectum

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 2

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 3

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; VARIANT

&lt;222&gt; (1)...(8)

<223> Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu; Xaa in position 6 is Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser; Xaa in position 8 is Ser or Thr;

<220>

<221> VARIANT

<222> (9)...(22)

<223> Xaa in position 9 is Asp or Glu; Xaa in position 10 is Leu, Ile, Val, pentylglycine or Met; Xaa in position 14 is Leu, Ile, pentylglycine, Val or Met; Xaa in position 22 is Phe, Tyr or naphthylalanine;

<220>

<221> VARIANT

<222> (23)...(25)

<223> Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met; Xaa in position 24 is Glu or Asp; Xaa in position 25 is Trp, Phe, Tyr, or naphthylalanine;

<220>

<221> VARIANT

<222> (31)...(40)

<223> Xaa in positions 31, 36, 37 and 38 are independently Pro, homoproline, 3-hydroxyproline, 4-hydroxyproline, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine; Xaa in position 39 is Ser, Thr or Tyr;

<220>

<221> VARIANT

<222> (40)...(40)

<223> Xaa in position 40 is -OH or -NH<sub>2</sub>; with the proviso that the compound is not exendin-3 or exindin-4.

<400> 3

Xaa	Xaa	Xaa	Gly	Thr	Xaa	Xaa	Xaa	Xaa	Xaa	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Xaa	Xaa	Xaa	Xaa	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa	Xaa	Xaa	Xaa
			35				40

<210> 4

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> VARIANT  
 <222> (1)...(7)  
 <223> Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu; Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala, Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser;

<220>  
 <221> VARIANT  
 <222> (8)...(13)  
 <223> Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentylglycine or Met; Xaa in position 11 is Ala or Ser; Xaa in position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln;

<220>  
 <221> VARIANT  
 <222> (14)...(20)  
 <223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position 19 is Ala or Val; Xaa in position 20 is Ala or Arg;

<220>  
 <221> VARIANT  
 <222> (21)...(24)  
 <223> Xaa in position 21 is Ala or Leu; Xaa in position 22 is Ala, Phe, Tyr or naphthylalanine; Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met; Xaa in position 24 is Ala, Glu or Asp;

<220>  
 <221> VARIANT  
 <222> (25)...(28)  
 <223> Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine; Xaa in position 26 is Ala or Leu; Xaa in position 27 is Ala or Lys; Xaa in position 28 is Ala or Asn;

<220>  
 <221> VARIANT  
 <222> (29)...(29)  
 <223> Xaa in position 29 is -OH; -NH<sub>2</sub>, Gly-Z<sub>2</sub>, Gly Gly-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub>-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub>-Z<sub>2</sub>;

<220>  
 <221> VARIANT  
 <222> (29)...(29)  
 <223> Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub> Xaa<sub>37</sub>-Z<sub>2</sub>; or Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub> Xaa<sub>37</sub> Xaa<sub>38</sub>-Z<sub>2</sub>;

<220>

<221> VARIANT

<222> (29)...(29)

<223> where Xaa<sub>31</sub>, Xaa<sub>36</sub>, Xaa<sub>37</sub> and Xaa<sub>38</sub> are independently Pro, homoproline, 3-hydroxyproline, 4-hydroxyproline, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine; and Z<sub>2</sub> is -OH or -NH<sub>2</sub>;

<220>

<221> VARIANT

<222> (3)...(28)

<223> provided that no more than three of Xaa in positions 3, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26, 27 and 28 are Ala.

<400> 4

Xaa	Xaa	Xaa	Gly	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5					10							15

Xaa	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20											25

<210> 5

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> VARIANT

<222> (1)...(5)

<223> Xaa in position 1 is His, Arg, Tyr, Ala, Norval, Val or Norleu; Xaa in position 2 is Ser, Gly, Ala or Thr; Xaa in position 3 is Ala, Asp or Glu; Xaa in position 4 is Ala, Norval, Val, Norleu or Gly; Xaa in position 5 is Ala or Thr;

<220>

<221> VARIANT

<222> (6)...(10)

<223> Xaa in position 6 is Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser; Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is Ala, Norval, Val, Norleu, Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentylglycine or Met;

<220>

<221> VARIANT

<222> (11)...(16)

<223> Xaa in position 11 is Ala or Ser; Xaa in position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln; Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is Ala or Glu;

<220>

<221> VARIANT

<222> (17)...(22)

<223> Xaa in position 17 is Ala or Glu; Xaa in position 19 is Ala or Val; Xaa in position 20 is Ala or Arg; Xaa in position 21 is Ala or Leu; Xaa in position 22 is Phe, Tyr or naphthylalanine;

<220>

<221> VARIANT

<222> (23)...(26)

<223> Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met; Xaa in position 24 is Ala, Glu or Asp; Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine; Xaa in position 26 is Ala or Leu;

<220>

<221> VARIANT

<222> (27)...(29)

<223> Xaa in position 27 is Ala or Lys; Xaa in position 28 is Ala or Asn; Xaa in position 29 is -OH, -NH<sub>2</sub>, Gly-Z<sub>2</sub>, Gly Gly-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub>-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala-Z<sub>2</sub>,

<220>

<221> VARIANT

<222> (29)...(29)

<223> Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub>-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub> Xaa<sub>37</sub>-Z<sub>2</sub>, Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub> Xaa<sub>37</sub> Xaa<sub>38</sub>-Z<sub>2</sub> or Gly Gly Xaa<sub>31</sub> Ser Ser Gly Ala Xaa<sub>36</sub> Xaa<sub>37</sub> Xaa<sub>38</sub> Xaa<sub>39</sub>-Z<sub>2</sub>;

<220>

<221> VARIANT

<222> (29)...(29)

<223> wherein Xaa<sub>31</sub>, Xaa<sub>36</sub>, Xaa<sub>37</sub> and Xaa<sub>38</sub> are independently Pro, homoproline, 3-hydroxyproline, 4-hydroxyproline, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine; and Z<sub>2</sub> is -OH or -NH<sub>2</sub>;

<220>

<221> VARIANT

<222> (3)...(28)

<223> provided that no more than three of Xaa in positions 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26, 27 and 28 are Ala;

<220>

<221> VARIANT

<222> (1)...(5)

<223> and provided also that, if Xaa in position 1 is His, Arg or Tyr, then at least one of Xaa in positions 3, 4 and 9 is Ala.

<400> 5

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5					10						15	

Xaa	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20					25								

<210> 6

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (30)...(30)

<223> amidated Gly (Glycinamide)

<400> 6

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20					25					30

<210> 7

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (30)...(30)  
 <223> amidated Gly (Glycinamide)

<400> 7

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20				25					30	

<210> 8  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 8

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Ala	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 9  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)



His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Ser  
35

```
<210> 10
<211> 39
<212> PRT
<213> Artificial Sequence
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<220>  
<223> artificially synthesized sequence of novel exendin agonist compound

```
<220>
<221> AMIDATION
<222> (39)...(39)
<223> amidated Ser (Serinamide)
```

<400> 10

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
1 5 10 15  
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30  
Ser Gly Ala Pro Pro Pro Ser  
35

```
<210> 11
<211> 39
<212> PRT
<213> Artificial Sequence
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<220>  
<223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 11

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

<210> 12  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 12

Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

<210> 13  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Tyr (Tyrosinamide)

&lt;400&gt; 13

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Tyr
			35			

&lt;210&gt; 14

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 14

His	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 15  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 6 stands for naphthylalanine.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 15

His	Gly	Glu	Gly	Thr	Xaa	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 16  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 16

His	Gly	Glu	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser Gly Ala Pro Pro Pro Ser  
35

<210> 17  
<211> 39  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (39)...(39)  
<223> amidated Ser (Serinamide)

<400> 17

His Gly Glu Gly Thr Phe Ser Thr Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
20 25 30

Ser Gly Ala Pro Pro Pro Ser  
35

<210> 18  
<211> 39  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (39)...(39)  
<223> amidated Ser (Serinamide)

<400> 18

His Gly Glu Gly Thr Phe Thr Thr Asp Leu Ser Lys Gln Met Glu Glu  
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

<210> 19  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 19

His Gly Glu Gly Thr Phe Thr Ser Glu Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

<210> 20  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <223> Xaa in position 10 stands for pentylglycine.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

&lt;400&gt; 20

His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 21

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in position 10 stands for pentylglycine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 21

His Gly Glu Gly Thr Phe Thr Ser Asp Xaa Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 22

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 14 stands for pentylglycine.

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 22

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro	Ser									
			35												

<210> 23

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 14 stands for pentylglycine.

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 23

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro	Ser									
			35												



<210> 24  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 22 stands for naphthylalanine.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 24

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 25  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 25

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25					30			

Ser Gly Ala Pro Pro Pro Ser  
35

<210> 26  
<211> 39  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (39)...(39)  
<223> amidated Ser (Serinamide)

<400> 26

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly Ala Pro Pro Pro Ser  
35

<210> 27  
<211> 39  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<223> Xaa in position 23 stands for tertiary-butylglycine.

<220>  
<221> AMIDATION  
<222> (39)...(39)  
<223> amidated Ser (Serinamide)

&lt;400&gt; 27

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 28

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in position 23 stands for tertiary-butylglycine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 28

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Phe Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Pro Pro Pro Ser  
 35

&lt;210&gt; 29

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 29

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Asp	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
						35

<210> 30  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 30

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
						35

<210> 31  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in positions 31, 36, 37 and 38 stands for thioproline.

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 31

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25						30	

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
						35

<210> 32

<211> 39

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in positions 36, 37 and 38 stands for thioproline.

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 32

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25						30	

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
						35

<210> 33  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 33

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
			35			

<210> 34  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 36, 37 and 38 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 34

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser  
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser  
 35

<210> 35  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stands for thioproline.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 35

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser  
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser  
 35

<210> 36  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 36

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Xaa Ser  
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser  
 35

<210> 37  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stands for n-methylalanine.

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 37

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
 20 25 30

Ser Gly Ala Xaa Xaa Xaa Ser  
 35

<210> 38  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence



&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in positions 36, 37 and 38 stands for n-methylalanine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 38

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
			35			

&lt;210&gt; 39

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in positions 31, 36, 37 and 38 stands for n-methylalanine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (39)...(39)

&lt;223&gt; amidated Ser (Serinamide)

&lt;400&gt; 39

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa	Xaa	Ser
			35			

<210> 40  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 40

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn				
			20					25							

<210> 41  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 41

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

<210> 42  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 42

His	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 43

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 43

His	Gly	Glu	Gly	Ala	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 44

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 44

His	Gly	Glu	Gly	Thr	Ala	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 45  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 45

His	Gly	Glu	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 46  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 46

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 47  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 47

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 48  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

&lt;400&gt; 48

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

&lt;210&gt; 49

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 49

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

&lt;210&gt; 50

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 50

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Ala	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 51

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 51

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 52

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 52

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 53

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 53

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 54

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)



&lt;400&gt; 54

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Ala	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 55

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 55

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 56

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 56

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn  
 20 25

<210> 57  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 57

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Asn  
 20 25

<210> 58  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 58

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu  
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn  
 20 25

<210> 59  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 59

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Ala	Lys	Asn
			20					25			

<210> 60  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 60

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Ala	Asn
			20					25			

<210> 61  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Ala (Alaninamide)

<400> 61

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Ala
			20						25		

<210> 62  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated Pro (Prolinamide)

<400> 62

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20						25					30	

Ser	Gly	Ala	Pro	Pro	Pro
			35		

<210> 63  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated Pro (Prolinamide)

<400> 63

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro										
			35												

<210> 64  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Pro (Prolinamide)

<400> 64

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro											
			35												

<210> 65  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Pro (Prolinamide)

<400> 65

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro											
			35												

<210> 66  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated Pro (Prolinamide)

<400> 66

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro												
			35												

<210> 67  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated Pro (Prolinamide)

<400> 67

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro												
			35												

<210> 68  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 68

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala													
			35												

<210> 69  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 69

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala													
			35												

<210> 70  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (34)...(34)  
 <223> amidated Gly (Glycinamide)

<400> 70

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly														



<210> 71  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (34)...(34)  
 <223> amidated Gly (Glycinamide)

<400> 71

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly

<210> 72  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (33)...(33)  
 <223> amidated Ser (Serinamide)

<400> 72

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 73  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (33)...(33)  
 <223> amidated Ser (Serinamide)

<400> 73

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 74  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (32)...(32)  
 <223> amidated Ser (Serinamide)

<400> 74

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 75  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (32)...(32)  
 <223> amidated Ser (Serinamide)

<400> 75

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 76  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (31)...(31)  
 <223> amidated Pro (Prolinamide)

<400> 76

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	
			20					25					30		

<210> 77  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (31)...(31)  
 <223> amidated Pro (Prolinamide)

<400> 77

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro
			20					25					30	

<210> 78  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (30)...(30)  
 <223> amidated Gly (Glycinamide)

<400> 78

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly
			20					25					30

<210> 79  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (29)...(29)  
 <223> amidated Gly (Glycinamide)

<400> 79

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly
			20				25					

<210> 80  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (29)...(29)  
 <223> amidated Gly (Glycinamide)

<400> 80

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly
			20				25					

<210> 81  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stand for thioproline.

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated tPro (thioprolinamide)

<400> 81

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 82  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 36, 37 and 38 stand for thioproline.

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated tPro (thioprolinamide)

<400> 82

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 83  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 31 stands for n-methylalanine.

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Pro (Prolinamide)

<400> 83

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro											
			35												

<210> 84  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36 and 37 stands for n-methylalanine.

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Nmeala (n-methylalaninamide)

<400> 84

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30

Ser Gly Ala Xaa Xaa  
                   35

<210> 85  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
           compound

<220>  
 <223> Xaa in positions 31, 36 and 37 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated hPro (homoprolinamide)

<400> 85

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30

Ser Gly Ala Xaa Xaa  
                   35

<210> 86  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
           compound

<220>  
 <223> Xaa in positions 31 and 36 stands for homoproline.



<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated hPro (homoprolinamide)

<400> 86

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa
			35

<210> 87  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 87

Arg	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala
		35

<210> 88  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (30)...(30)

&lt;223&gt; amidated Gly (Glycinamide)

&lt;400&gt; 88

His	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20				25					30	

&lt;210&gt; 89

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in position 6 stands for naphthylalanine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 89

His	Gly	Glu	Gly	Thr	Xaa	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 90

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 90

His	Gly	Glu	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 91

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 91

His	Gly	Glu	Gly	Thr	Phe	Ser	Thr	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 92

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 92

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Glu	Leu	Ser	Lys	Gln	Met	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 93

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;223&gt; Xaa in position 10 stands for pentylglycine.

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 93

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 94

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 22 stands for naphthylalanine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 94

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 95

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 23 stands for tertiary-butylglycine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 95

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 96  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 96

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Asp	Phe	Leu	Lys	Asn
			20					25			

<210> 97  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (33)...(33)  
 <223> amidated Ser (Serinamide)

<400> 97

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 98  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (29)...(29)  
 <223> amidated Gly (Glycinamide)

<400> 98

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly			
			20					25							

<210> 99  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36 and 37 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated hPro (homoprolinamide)

<400> 99

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa
			35	

<210> 100  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 100

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 101  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 101

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		



<210> 102  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 102

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 103  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 103

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 104  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 104

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 105  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 105

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 106  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 106

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 107  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 107

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 108  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 108

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 109  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 109

Ala	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 110  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 110

Ala	Ala	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 111  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 111

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 112  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 112

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 113  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 113

Ala	Gly	Asp	Gly	Ala	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 114  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 114

Ala	Gly	Asp	Gly	Ala	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 115  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 6 stands for naphthylalanine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 115

Ala	Gly	Asp	Gly	Thr	Xaa	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 116  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Xaa in position 6 stands for naphthylalanine.

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 116

Ala	Gly	Asp	Gly	Thr	Xaa	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 117

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 117

Ala	Gly	Asp	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 118

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence



&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 118

Ala	Gly	Asp	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

&lt;210&gt; 119

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 119

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

&lt;210&gt; 120

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 120

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ala	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

&lt;210&gt; 121

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 121

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

&lt;210&gt; 122

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 122

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 123

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 123

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Glu	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 124

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 124

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Glu	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

&lt;210&gt; 125

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; artificially synthesized sequence of novel exendin agonist compound

&lt;220&gt;

&lt;221&gt; AMIDATION

&lt;222&gt; (28)...(28)

&lt;223&gt; amidated Asn (Asparaginamide)

&lt;400&gt; 125

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

&lt;210&gt; 126

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 126

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 127

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 10 stands for pentylglycine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 127

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 128

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 10 stands for pentylglycine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 128

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 129

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 129

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 130  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 130

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ala	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 131  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 131

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 132  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 132

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Ala	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 133  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 133

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		



<210> 134  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 134

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20						25						

<210> 135  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 135

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Ala	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn				
			20						25						

<210> 136  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 136

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Ala	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20						25						

<210> 137  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 14 stands for pentylglycine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 137

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn				
			20						25						

<210> 138  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 14 stands for pentylglycine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 138

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Xaa	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 139  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 139

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 140  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 140

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 141  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> artificially synthesized sequence of novel exendin agonist  
compound

<220>  
<221> AMIDATION  
<222> (28)...(28)  
<223> amidated Asn (Asparaginamide)

<400> 141

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Ala
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 142  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 142

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

<210> 143  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 143

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn				
			20					25							

<210> 144  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 144

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 145  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 145

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Ala	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 146  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 146

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Ala	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 147  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 147

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 148  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 148

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Ala	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

<210> 149  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 149

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Ala	Phe	Ile	Glu	Trp	Leu	Lys	Asn				
			20					25							



<210> 150  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 150

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Ala	Phe	Ile	Glu	Phe	Leu	Lys	Asn				
			20					25							

<210> 151  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 22 stands for naphthylalanine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 151

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Trp	Leu	Lys	Asn				
			20					25							

<210> 152  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 22 stands for naphthylalanine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 152

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Xaa	Ile	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 153  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 153

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 154  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 154

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Val	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 155  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 23 stands for tertiary-butylglycine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 155

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Trp	Leu	Lys	Asn
			20						25		

<210> 156  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in position 23 stands for tertiary-butylglycine.

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 156

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Xaa	Glu	Phe	Leu	Lys	Asn
			20						25		

<210> 157  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 157

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Asp	Trp	Leu	Lys	Asn
			20						25		

<210> 158  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 158

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Asp	Phe	Leu	Lys	Asn				
			20					25							

<210> 159  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 159

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Asn				
			20					25							

<210> 160  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 160

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Ala	Leu	Lys	Asn				
			20					25							

<210> 161  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 161

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Ala	Lys	Asn				
			20					25							

<210> 162  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 162

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Ala	Lys	Asn
			20				25				

<210> 163  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 163

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Ala	Asn
			20				25				

<210> 164  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Asn (Asparaginamide)

<400> 164

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Ala	Asn				
			20					25							

<210> 165  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Ala (Alaninamide)

<400> 165

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Ala				
			20					25							



<210> 166  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (28)...(28)  
 <223> amidated Ala (Alaninamide)

<400> 166

Ala	Gly	Asp	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Ala				
			20					25							

<210> 167  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated Pro (Prolinamide)

<400> 167

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro										
			35												

<210> 168  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated Pro (Prolinamide)

<400> 168

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro										
			35												

<210> 169  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Pro (Prolinamide)

<400> 169

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro											
			35												

<210> 170  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated Pro (Prolinamide)

<400> 170

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro												
			35												

<210> 171  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated Pro (Prolinamide)

<400> 171

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro												
			35												

<210> 172  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 172

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala													
			35												

<210> 173  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 173

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala													
			35												

<210> 174  
 <211> 34  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (34)...(34)  
 <223> amidated Gly (Glycinamide)

<400> 174

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly

<210> 175  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (33)...(33)  
 <223> amidated Ser (Serinamide)

<400> 175

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 176  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (32)...(32)  
 <223> amidated Ser (Serinamide)

<400> 176

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 177  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
 compound

<220>  
 <221> AMIDATION  
 <222> (32)...(32)  
 <223> amidated Ser (Serinamide)

<400> 177

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 178  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (31)...(31)  
 <223> amidated Pro (Prolinamide)

<400> 178

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	
			20					25					30		

<210> 179  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (30)...(30)  
 <223> amidated Gly (Glycinamide)

<400> 179

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly		
			20					25					30		

<210> 180  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (29)...(29)  
 <223> amidated Gly (Glycinamide)

<400> 180

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly
			20				25					

<210> 181  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36, 37 and 38 stand for thioproline.

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated tPro (thioprolinamide)

<400> 181

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20				25					30			

Ser	Gly	Ala	Xaa	Xaa	Xaa
			35		



<210> 182  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 36, 37 and 38 stand for thioproline.

<220>  
 <221> AMIDATION  
 <222> (38)...(38)  
 <223> amidated tPro (thioprolinamide)

<400> 182

His	Gly	Glu	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 183  
 <211> 37  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <223> Xaa in positions 31, 36 and 37 stands for n-methylalanine.

<220>  
 <221> AMIDATION  
 <222> (37)...(37)  
 <223> amidated Nmeala (n-methylalaninamide)

<400> 183

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Ala	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30

Ser Gly Ala Xaa Xaa  
                   35

<210> 184  
 <211> 36  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
           compound

<220>  
 <223> Xaa in positions 31 and 36 stands for homoproline.

<220>  
 <221> AMIDATION  
 <222> (36)...(36)  
 <223> amidated hPro (homoprolinamide)

<400> 184

Ala Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu  
   1                  5                  10                  15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser  
                   20                  25                  30

Ser Gly Ala Xaa  
                   35

<210> 185  
 <211> 35  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist  
           compound

<220>  
 <221> AMIDATION  
 <222> (35)...(35)  
 <223> amidated Ala (Alaninamide)

<400> 185

His	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala													
															35

<210> 186  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (30)...(30)  
 <223> amidated Gly (Glycinamide)

<400> 186

His	Gly	Asp	Ala	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly		
			20					25					30		

<210> 187  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 187

Ala	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			

<210> 188  
 <211> 39  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>  
 <221> AMIDATION  
 <222> (39)...(39)  
 <223> amidated Ser (Serinamide)

<400> 188

Ala	Gly	Ala	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala	Pro	Pro	Pro	Ser
			35			